

WHAT IS CLAIMED IS:

- 1 1. A system for providing digital entertainment data, the system comprising:
 - 2 a data switch, the data switch having a plurality of switch ports;
 - 3 a mass storage device, the mass storage device coupled to a switch port of the
 - 4 plurality of switch ports of the data switch;
 - 5 a tuner, the tuner to select an information channel of a plurality of information
 - 6 channels;
 - 7 a demodulator, the demodulator coupled to both a switch port of the plurality of
 - 8 switch ports of the data switch, the tuner.
- 1 2. The system of claim 1, further comprising a Web-server, the Web-server coupled to
2 the data switch.
- 1 3. The system of claim 1, wherein the demodulator is to receive a transmission signal
2 and output an information signal, the transmission signal including a carrier signal and the
3 information signal.
- 1 4. The system of claim 1, the system further comprising decryption logic coupled to
2 the demodulator, the decryption logic to receive an encrypted information signal and
3 output a decrypted information signal.
- 1 5. The system of claim 1, the system further comprising encryption logic coupled to
2 the data switch, the encryption logic to receive an unencrypted information signal and
3 output an encrypted information signal.

1 6. The system of claim 1, further comprising a broadband data port, the broadband
2 data port coupled to a switch port of the plurality of switch ports of the data switch.

1 7. The system of claim 6, wherein the broadband data port is to receive data from a
2 broadband data service provider.

1 8. The system of claim 1, further comprising a first multimedia input, the first
2 multimedia input coupled to the tuner.

1 9. The system of claim 8, wherein the first multimedia input is to receive a plurality of
2 transmission signals.

1 10. The system of claim 9, wherein the plurality of transmission signals include a
2 plurality of television program signals.

1 11. The system of claim 9, wherein the plurality of transmission signals include an
2 audio signal.

1 12. The system of claim 9, wherein the plurality of transmission signals include a data
2 signal.

1 13. The system of claim 9, wherein the plurality of transmissions signals are received
2 from a transmission facility selected from the group consisting of a direct broadcast
3 satellite, a cable headend, and a terrestrial transmitter.

1 14. The system of claim 9, wherein the plurality of transmission signals are
2 multiplexed transmission signals selected from the group of frequency divided multiplexed
3 transmission signals, time divided multiplexed transmission signals, code divided
4 multiplexed transmission signals, wavelength divided multiplexed transmission signals,
5 and dense wavelength divided multiplexed transmission signals.

1 15. The system of claim 1, wherein the tuner selects an information channel of a
2 plurality of information channels at least in part by
3 receiving a plurality of transmission signals, and
4 outputting a transmission signal of the plurality of transmission signals.

1 16. The system of claim 1, wherein the mass storage device receives and stores the
2 information signal.

1 17. The system of claim 1, wherein
2 the data switch receives the information signal,
3 the data switch sends the information signal to the mass storage device, and
4 the mass storage device stores the information signal.

1 18. The system of claim 1, wherein
2 an analog-to-digital converter receives the information signal,
3 the analog-to-digital converter outputs a digital information signal, the digital
4 information signal based at least in part on the information signal, and
5 the mass storage device stores the digital information signal.

1 19. The system of claim 18, wherein the digital information signal is an Motion
2 Pictures Expert Group 2 (MPEG-2) encoded digital information signal.

1 20. The system of claim 1, wherein
2 an analog-to-digital converter receives the information signal,
3 the analog-to-digital converter outputs a digital information signal, the digital
4 information signal based at least in part on the information signal,
5 encryption logic receives the digital information signal,
6 the encryption logic outputs an encrypted digital information signal, and
7 the mass storage device stores the encrypted digital information signal.

1 21. The system of claim 8, further comprising
2 a second multimedia input, the second multimedia input coupled to a switch port of
3 the data switch, the second multimedia input to receive a multimedia signal,
4 wherein the data switch is to receive the multimedia signal.

1 22. The system of claim 1, further comprising
2 a plurality of broadband data communication links, each broadband data
3 communication link of the plurality of broadband data communication links coupled to a
4 respective switch port of the plurality of switch ports of the data switch, and
5 a plurality of digital set top boxes, each digital set top box of the plurality of digital
6 set top boxes coupled to a respective broadband data communication link.

1 23. The system of claim 22, wherein the plurality of broadband data communication
2 links are selected from the group consisting of category 5 cables, category 5e cables,
3 category 6 cables, category 7 cables, and OC-3 cables.

1 24. The system of claim 22, wherein at least one digital set top box of the plurality of
2 digital set top boxes includes a digital data interface, the digital data interface to
3 communicate with the data switch.

1 25. The system of claim 22, further comprising a lower bandwidth communication
2 interface, the lower bandwidth communication interface coupled to a switch port of the
3 plurality of switch ports of the data switch.

1 26. The system of claim 25, wherein the lower bandwidth communication interface is
2 selected from the group consisting of a Home Phoneline Networking Alliance 2.0
3 (HomePNA 2.0) interface, a HomeRF Shared Wireless Access Protocol (HomeRF SWAP)
4 interface, an IEEE 802.11 interface, and a Bluetooth interface.

1 27. The system of claim 1, wherein the data switch is an Ethernet switch.

1 28. The system of claim 24, wherein the digital data interface is an Ethernet interface.

1 29. The system of claim 1, wherein the data switch is a router.

1 30. A system for providing digital entertainment data, the system comprising:

2 a first tuner, the first tuner adapted to receive a plurality of transmission signals and

3 to selectively output a first transmission signal of the plurality of transmission signals;

4 a first demodulator, the first demodulator coupled to the first tuner, the first

5 demodulator adapted to receive the transmission signal, the transmission signal including

6 an information signal, the first demodulator to output the information signal;

7 a data switch, the data switch coupled to the first demodulator, the data switch

8 adapted to receive the information signal; and

9 a mass storage device, the mass storage device coupled to the data switch, the mass

10 storage device adapted to store the information signal.

1 31. The system of claim 30, further comprising:

2 decryption logic coupled to the first demodulator

3 encryption logic coupled to the decryption logic,

4 wherein the information signal is a first encrypted information signal, the

5 decryption logic decrypting the first encrypted information signal, the encryption logic

6 encrypting the decrypted first encrypted information signal to generate a second encrypted

7 information signal, the second encrypted information signal being sent to the data switch,

8 the mass storage device storing the second encrypted information signal..

1 32. The system of claim 30, wherein the data switch has a plurality of high bandwidth

2 switch ports.

1 33. The system of claim 32, wherein the plurality of high bandwidth switch ports
2 include a plurality of 100Base-T Ethernet switch ports.

1 34. The system of claim 32, wherein the data switch has a switch port coupled to a
2 lower bandwidth communications device.

1 35. The system of claim 34, wherein the lower bandwidth communications device is
2 selected from the group consisting of a Home Phoneline Networking Alliance (HomePNA)
3 port, a HomeRF Shared Wireless Access Protocol (SWAP) transceiver, an IEEE 802.11
4 transceiver, and a Bluetooth transceiver.

1 36. A method of providing digital entertainment data, the method comprising:
2 receiving a plurality of transmission signals, each transmission signal including an
3 information signal;
4 selecting a first transmission signal of the plurality of transmission signals;
5 demodulating the first transmission signal to isolate a first information signal;
6 storing the first information signal on a mass storage device;
7 sending the first information signal to a digital data switch; and
8 sending the first information signal to a first broadband communications link
9 coupled to the digital data switch.

1 37. The method of claim 36, wherein:

2 sending the first information signal to a digital data switch includes

3 sending the first information signal to an analog-to-digital converter, and

4 outputting a first digital information signal, the first digital information signal

5 based at least in part on the first information signal; and

6 wherein sending the first information signal to a first broadband communications

7 link coupled to the digital data switch includes sending the first digital information signal

8 to the first broadband communications link coupled to the digital data switch.

1 38. The method of claim 36, further comprising:

2 selecting a second transmission signal of the plurality of transmission signals;

3 demodulating the second transmission signal to isolate a second information signal;

4 sending the second information signal to the digital data switch; and

5 sending the second information signal to a second broadband communications link

6 coupled to the digital data switch.

1 39. The method of claim 38, further comprising storing the second information signal

2 on the mass storage device.

1 40. The method of claim 36, further comprising receiving from the first broadband

2 communications link a command to control sending of the first information signal.

1 41. The method of claim 40, wherein the command to control sending of the first
2 information signal is selected from the group of a command to pause sending of the first
3 information signal, a command to resend the first information signal, a command to
4 increase a rate of sending of the first information signal, a command to decrease a rate of
5 sending the first information signal, a command to stop sending the first information
6 signal, and a command to resume sending of the first information signal.

1 42. The method of claim 38, further comprising receiving a command from the second
2 broadband communications link to control sending of the second information signal.

1 43. The method of claim 36, further comprising:
2 selecting a third transmission signal of the plurality of transmission signals;
3 demodulating the third transmission signal to isolate a third information signal;
4 sending the third information signal to the digital data switch; and
5 sending the third information signal to a first data communications link coupled to
6 the digital data switch, the first data communications link having a lower bandwidth than
7 the first broadband communications link.

1 44. The method of claim 36, wherein the digital data switch is an Ethernet switch.

1 45. The method of claim 36, wherein the digital data switch is a router.

1 46. The method of claim 36, wherein the first broadband communication link is
2 selected from the group consisting of a category 5 cable, a category 5e cable, a category 6
3 cable, a category 7 cable, and an OC-3 cable.

1 47. The method of claim 44, wherein the first data communications link is selected
2 from the group consisting of a Home Phoneline Networking Alliance (HomePNA)
3 communications link, a HomeRF Shared Wireless Access Protocol (SWAP)
4 communications link, an IEEE 802.11 communications link, and a Bluetooth
5 communications link.

1 48. A system for providing digital entertainment data, the system comprising:
2 means for selectively outputting a first transmission signal of a plurality of
3 transmission signals;
4 means for demodulating the first transmission signal to generate an information
5 signal, the means for demodulating coupled to the means for selectively outputting;
6 means for switching digital data, the means for switching digital data coupled to the
7 means for demodulating, the means for switching digital data adapted to receive the
8 information signal; and
9 means for mass storage, the means for mass storage coupled to the means for
10 switching digital data, the means for mass storage adapted to store the information signal.

1 49. The system of claim 48, further comprising a plurality of means for broadband
2 communications coupled to the means for switching digital data.

1 50. The system of claim 49, further comprising a plurality of means for interfacing a
2 multimedia device, each means for interfacing a multimedia device coupled to a respective
3 means for broadband communications.

1 51. The system of claim 48, further comprising means for lower bandwidth
2 communications coupled to the means for switching digital data.